CLAIMS

At the time of the Action:

Pending Claims: 1, 5, 7, 8, 10-13, 16, 18, 19, 24, 25, 27, 28 and 30-53

Withdrawn Claims: None

Canceled Claims: 2-4, 6, 9, 14-15, 17, 20-23, 26 and 29

After this Response:

Pending Claims: 1, 5, 7, 8, 10-13, 16, 18, 19, 24, 25, 27, 28 and 30-53

Amended Claims: 1, 11, 19, 30 and 33

Withdrawn: None

Canceled Claims: 2-4, 6, 9, 14-15, 17, 20-23, 26 and 29

New Claims: None

1. (Currently Amended) A system that facilitates a user interface, comprising:

a user command to control a computer system received from a gesture, wherein control of the computer system comprises controlling computer programs by manipulating onscreen objects without a cursor; and

a 3-D imaging component that captures the gesture in the form of a gesture image, processes the gesture image, and interprets the gesture image to execute the user command for control of the computer system and the imaging component permits different users to select different commands from a plurality of user commands executable by the computer system, to associate with the received gesture such that the received gesture executes the user

command based on a user profile and on a particular application executing on the computer system.

2-4. (Canceled)

5. (Previously Presented) The system of claim 1, further comprising a voice communication system that receive voice signals that are used singly or in combination with the gesture to control the computer system.

6. (Canceled)

7. (Previously Presented) The system of claim 1, the 3-D imaging system determines when an operator is looking in the direction of the computer system.

8. (Original) The system of claim 1, the 3-D imaging component is distributed across the computer system and at least one other computer system.

9. (Canceled)

10. (Previously Presented) A computer readable medium having stored thereon computer executable instructions for carrying out the system of claim 1.

11. (Currently Amended) A system that facilitates a user interface in a medical environment, comprising:

a user command to control an object of a computer system received as a gesture, wherein the object is a device connected to the computer or an application running on the computer;

a 3-D imaging component that captures the gesture in the form of a gesture image, processes the gesture image, and interprets the gesture image to execute the user command for control of the computer system, the imaging component permits user selection of association of gestures with user commands selected from a plurality of user commands executable by the computer, wherein different users employ different gestures for execution of a given command, the association being determined during execution based on a user profile and on a particular application executing on the computer system; and

a wireless control device worn by the user, comprising sensors that measure orientation of the wireless control device, the orientation information utilized to determine selection of the object, the gesture utilized to control the object of the computer system without a cursor.

12. (Previously Presented) The system of claim 11, the wireless control device includes a sensor that outputs at least one of a single axis signal and tri-axial signal.

13. (Previously Presented) The system of claim 11, the object comprises at least one of hardware and software of the control system.

14-15. (Canceled)

16. (Previously Presented) The system of claim 11, the gesture includes the use of both hands of an operator to cause execution of the user command.

17. (Canceled)

18. (Previously Presented) The system of claim 11, the wireless control device is used to determine when line of sight of an operator interacts with computer system for control of the object.

19. (Currently Amended) A method of controlling a computer system using a gesture, comprising:

permitting different users to select different gestures for execution of a user command selected from a plurality of commands on the computer system;

identifying a user based in part on a radio frequency signal assigned to the user;

capturing one aspect of a gesture in the form of a 3-D gesture image;

processing the 3-D gesture image and utilizing a user profile to determine an associated user command preselected by the user to associate with the received gesture; and

executing the user command to effect manipulation of an object of the computer system based on the selection obtained from a user profile and on a particular application

executing on the computer system, wherein the object is a device connected to the computer or an application running on the computer.

20-23. (Canceled)

24. (Previously Presented) The method of claim 19, further comprising controlling the object, which is 3-D image data, by presenting one or more gestures that facilitate at least one of rotation about an axis that corresponds to smooth rotation of a user's hand, rotation about a vertex of the 3-D image data, and stepped rotation.

25. (Previously Presented) The method of claim 19, further comprising controlling the object, which object is associated with at least one of lighting, display intensity, and volume control of an audio signal.

26. (Canceled)

27. (Previously Presented) The method of claim 19, further comprising identifying the gesture with a user *via* a radio frequency tag.

28. (Previously Presented) The method of claim 27, the tag is attached to a glove worn by the user.

29. (Canceled)

30. (Currently Amended) A method of controlling a computer system in an operating room environment, comprising:

calibrating the computer system according to a user profile of individualized gesture data by presenting associated gestures using at least one or more body motions;

mapping the gesture data to at least one user command selected from a plurality of user commands that is executable by the computer system, the mapping also being based on a particular application executing on the computer system;

invoking the user profile according to a unique radio frequency signal that identifies a user;

presenting the gestures to a 3-D imaging system for capture and processing;

interpreting 3-D renderings of the gestures to retrieve the associated user commands; and

executing the user commands to effect manipulation of an object of the computer system.

31. (Previously Presented) The method of claim 30, further comprising automatically including a second user profile of individualized gestures data with the user profile of individualized gesture data with when the associated second user is detected within the operating room environment.

32. (Previously Presented) The method of claim 30, further comprising automatically learning gesture characteristics of a user associated with the user profile, and updating the user profile with the learned gesture characteristics.

33. (Currently Amended) A computer-readable medium having computer-executable instructions for performing a method of controlling a computer system using gestures, the method comprising:

receiving gesture calibration data in the form of 3-D images of the gestures;

mapping the gesture calibration data to at least one user command that is executable by the computer system, the mapping also being based on a particular application executing on the computer system;

associating the mapped gesture calibration data with a user profile of a user, wherein different users are allowed to select different commands to associate with the received gesture, the different commands are executable by the computer system;

invoking the user profile according to a unique radio frequency signal received from the user;

processing subsequent 3-D images of the gestures received via a camera system;

interpreting the subsequent 3-D images of the gestures to retrieve the associated user commands; and

executing the user commands to effect manipulation of a hardware or software object of the computer system.

34. (Previously Presented) The method of claim 33, further comprising presenting and manipulating 3-D images of system data in response to presenting the gestures.

35. (Previously Presented) The method of claim 33, further comprising defining a volume of space over a patient on an operating table, and processing one or more of the gestures presented within the volume of space to effect control of the computer before, during, or after an operating procedure on the patient.

36. (Previously Presented) A system for controlling a computer during a medical procedure using one or more hand gestures of a medical person, comprising:

means for capturing a gesture presented by a medical person, in the form of a 3-D image;

means for processing the 3-D image of the gesture to allow recognition thereof;

means for returning a computer command associated with the recognized gesture, wherein different commands are returned associated with different users for the received gesture and wherein the different commands are based on a particular application executing on the computer system, the different commands are executable by the computer system; and

means for executing the computer command to facilitate manipulation of medical information presented on a display to the medical person.

37. (Previously Presented) The system of claim 36, further comprising means for confirming use of the computer command with the recognized gesture.

38. (Previously Presented) The system of claim 36, the gesture includes means for generating an audio signal in the form of at least one of vocalizations and clicking.

39. (Previously Presented) The system of claim 1, the 3-D imaging component captures a gesture formed by using at least one hand.

40. (Previously Presented) The system of claim 1, the 3-D imaging component captures a gesture formed using a head movement.

41. (Previously Presented) The system of claim 1, the 3-D imaging component initiates a confirmation request signal in response to receiving the gesture.

42. (Previously Presented) The system of claim 1, the 3-D imaging component detects gesture characteristics in the captured gesture, which gesture characteristics include at least one of hand movement, finger count, finger orientation, hand orientation, and hand rotation.

43. (Previously Presented) The system of claim 1, the 3-D imaging component continually monitors location of a given user bearing a tag via a triangulation system, and associates the location data with captured image data such that gestures from that location will be processed against associated user profile to properly execute the user command.

44. (Previously Presented) The system of claim 1, the 3-D imaging component controls windows in the computer system based on dwell time of the received gesture wherein dwell time is a time after having engaged the computer system, that the user holds their hand position stationary such that a system icon remains over a particular window.

45. (Previously Presented) The system of claim 11, the 3-D imaging component utilizes the captured gesture to facilitate rotation of data presented by the computer system about at least one of an axis and a vertex of the data.

46. (Previously Presented) The system of claim 11, the 3-D imaging component utilizes the captured gesture to manipulate image data presented by the computer system, which manipulation of data includes at least one axis translation, zoom control, and paging through multiple images of the image data.

47. (Previously Presented) The system of claim 11, the 3-D imaging component associates the captured gesture with a unique user.

48. (Previously Presented) The system of claim 11, the 3-D imaging component further comprising processing subsequent gesture images to interpret the gesture for manipulation of the object.

49. (Previously Presented) The system of claim 11, the 3-D imaging component further comprising presenting the gesture as at least one of a hand manipulation, a gaze signal, or a vocalization, to control the object.

50. (Previously Presented) The system of claim 11, the 3-D imaging component automatically changes user profiles when a user programmed to interact therewith has been replaced by a second user.

51. (Previously Presented) The system of claim 11, the controlled object is associated with video data and the 3D imaging component executes the user command to at least one of start, stop, freeze or loop the video data.

52. (Previously Presented) The method of claim 19, the associated user command is characterized according to finger usage and hand pose.

53. (Previously Presented) The system of claim 1, further comprising a classifier that tracks, processes, compares and updates a user profile when a command gesture associated with a particular user command is changed within a specified criterion after a calibration process.